

SENECIO CYMBALARIOIDES, S. SUBNUDUS, AND S. SUBPELTATUS,
HISTORY OF A MUDDLE (ASTERACEAE: SENECEONEAE)

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ABSTRACT

An attempt is made to disentangle the history and present applications of the combinations *Senecio cymbalarioides*, *S. subnudus*, and *S. subpeltatus* (Asteraceae: Senecioneae), all three consisting of pairs of homonyms. The ensuing confusion was exacerbated by further errors, misinterpretations, and elucidations in the nomenclatural rules and is briefly sketched here. The South African *S. subnudus* DC. is lectotypified.

RESUMEN

Se realiza un intento de esclarecer la historia y aplicaciones presentes de las combinaciones *Senecio cymbalarioides*, *S. subnudus*, y *S. subpeltatus* (Asteraceae: Senecioneae), siendo todas ellas pares de homónimos. La consiguiente confusión fue exacerbada con otros errores, las malinterpretaciones, y elucidaciones de las reglas nomenclaturales son esbozadas brevemente aquí. Se lectotipifica el surafricano *S. subnudus* DC.

INTRODUCTION

Senecio L. is a cosmopolitan genus with 1500+ species. Morphological research in the past and in present molecular analyses indicate that it is polyphyletic and that it should be broken up in numerous smaller genera. As this is a nomenclatural exercise I here give what I think are the correct names in *Senecio* and its split-offs whenever possible. According to the present insights *Packera* Á. & D. Löve and *Roldana* La Llave are “good” genera.

In his revision of the Compositae in the Great Prodrômus De Candolle (1838) used the combination *Senecio subnudus* twice, once for a species from South Africa (p. 405, # 381), and again for one from the United States (p. 428, # 522). The first to choose between the two was Buek (1840), closely followed by Steudel (1841). Unfortunately, the first maintained # 381 and renamed # 522, while the second did it the other way around.

Apparently, it is not generally known that Buek made an index to the Prodrômus, and, moreover, most are not aware that when De Candolle’s treatment was based on specimen(s) in G-DC there are IDC microfiches with photographs of the specimen(s), arranged according to volume, page, and species number.

***Senecio subnudus* DC. (# 381) — *Senecio oxyriifolius* DC.**

Senecio subnudus DC., Prodr. 6:405. 1837 [publ.1838], # 381, non p. 428, # 522. *Senecio subpeltatus* Steud., Nomencl. ed. 2, 2:565. 1841 (nom. superfl.). TYPE: AFRICA CAPENSIS. DISTR. STELLENBOSCH: *Ecklon* 787.56.8 A° 1835 (LECTOTYPE, designated here: HOLOTYPE: G-DC; IDC MICROFICHE 800).

= *Senecio oxyriifolius* DC., Prodr. 6:405. 1837 [publ. 1838], # 379 (*oxyriaefolius*).

Harvey (1865) was the first to include the equally old *Senecio peltatus* DC., *S. subnudus* DC. (# 381), and *S. peltiformis* DC. in *S. oxyriifolius* DC. (see Stearn 1955), and if this merge is accepted, the latter is the correct name in *Senecio* L. The species is part of a clade of South African and Madagascan succulents of the ‘Gynuroid’ group, and will have to be transferred to another or even a new genus (P. Pelsner, pers. comm.).

Senecio subnudus DC. (# 522), Senecio cymbalarioides H. Buek — Packera subnuda (DC.) Trock & T.M. Barkley

Senecio subnudus DC., Prodr. 6:428. 1837 [publ. 1838], # 522, non p. 405, # 381. Steud., Nomencl., ed. 2, 2:565. 1841. *Senecio cymbalarioides* H. Buek, Gen. Sp. Synon. Cand. 2:vi. 1840, nom. nov. *Senecio aureus* L. var. *subnudus* A. Gray, Syn. Fl. N. Amer. 1, 2:391. 1884. *Senecio pauciflorus* Pursh var. *subnudus* Jeps., Man. Fl. Pl. Calif. 1154. 1925. *Packera cymbalarioides* W.A. Weber & Á. Löve in W.A. Weber, Phytologia 55:9. 1984, non W.A. Weber and Á. Löve (1981). *Packera buekii* Trock & T.M. Barkley, Sida 18:387. 1998, nom. superfl., see note. *Packera subnuda* Trock & T.M. Barkley, Sida 18:635. 1999. TYPE: AMERICAN WEST COAST: Columbia River, Douglas A* 1830 (HOLOTYPE: G-DC; IDC MICROFICHE 800), 'AB HON. SOC. HORTIC. LOND.' (This herbarium was broken up in auctions between 1856 and 1859. I do not know where the Asteraceae went. There is a possible duplicate in K "ex Herb. Benth." with a printed label, not handwritten as in G-DC. It is not impossible that when material was selected to be sent to De Candolle there was only a single printed label, so a handwritten copy had to be made).

= *Senecio cymbalarioides* H. Buek. or *Packera subnuda* (DC.) Trock & T.M. Barkley.

The status of the rejected name *S. subnudus* DC. # 522 has been clarified by the addition of Note 3 to Art. 53.6 in the ICBN (2006):

Art. 53.6. When two or more homonyms have equal priority, the first of them that is adopted in an effectively published text (Art. 29, 30, 31) by an author who simultaneously rejects the other(s) is treated as having priority. Likewise, if an author in an effectively published text substitutes other names for all but one of these homonyms, the homonym for the taxon that is not renamed is treated as having priority.

Note 3. A homonym renamed or rejected under Art. 53.6 remains legitimate and takes precedence over a later synonym of the same rank, should a transfer to another genus ... be effected.

Ex. 20. *Mimosa cineraria* L. (1759), based on *M. cinerea* L. (Sp. Pl. 517, non 520. 1753; see Art. 53 Ex. 18), was transferred to *Prosopis* by Druce (1914) as *P. cineraria* (L.) Druce. However, the correct name in *Prosopis* would have been a combination based on *M. cinerea* had not that name been successfully proposed for rejection.

According to Trock and Barkley (1998) followed by Trock (2006) *S. subnudus* DC. # 522 belongs to *Packera* Á. & D. Löve. Trock and Barkley (1998) had called it *P. buekii* which is superfluous as they should have used the epithet *subnuda* under Note 3 above. They corrected this a year later (1999) to *Packera subnuda* (DC.) Trock & T.M. Barkley.

Senecio subpeltatus Sch.-Bip. — Roldana subpeltata H. Rob. & Brettell

The second author to coin the combination *Senecio subpeltatus* was Schultz "Bipontinus" (1856) for a Mexican species. This is a later homonym of the one by Steudel (1841). Curiously, no one seems to have picked this up and proposed an alternative name in *Senecio* for it. When transferred to *Roldana* it is to be cited as *Roldana subpeltata* H. Rob. & Brettell (Art. 58.1), without bracketed authorship, i.e., not as [Sch.-Bip.] H. Rob. & Brettell.

In older Codes "square-bracketed authorship" was used to indicate that there was something "wrong" with the basionym, e.g. based on a pre-Linnaean one, or on an invalid or illegitimate base. Unfortunately, this useful application has quietly vanished after the Edinburgh Code (1966). The reference was still given in the index of the Seattle Code (1972), but not in the text.

Senecio subpeltatus Sch.-Bip., in Seem., Bot. Voy. Herald 311. 1856, non Steud. (1841). *Roldana subpeltata* H. Rob. & Brettell, Phytologia 27:424. 1974. TYPE: MEXICO: Sierra Madre, Seemann 1984 (HOLOTYPE: BM; ISOTYPE: K, P, F-photo, GH).

= *Roldana subpeltata* H. Rob. & Brettell

Dr. A.M. Funston (in sched.) regarded the K collection as the lectotype, but Seemann's "study set" for the Herald voyage is in BM (Stafleu & Cowan 1985: 474) and the holotype should be there.

Senecio cymbalarioides Nutt., non H. Buek

Senecio cymbalarioides Nutt., Trans. Amer. Phil. Soc. II, 7:412. 1841, non H. Buek (1840). *Packera cymbalarioides* W.A. Weber & Á. Löve, Phytologia 49:46. 1981. TYPE: U.S.A. OREGON: Nuttall s.n. (HOLOTYPE: BM).

The situation has become more complicated and confusing because Weber and Löve made the combination *Packera cymbalarioides* twice: once in 1981 based on Nuttall (1841), and again in 1984, based on Buek

(1840). The latter one is therefore a later homonym of the first one, and not an isonym, as was implicitly suggested by Weber and Löve (1984), who apparently thought that the same taxon was involved and that merely changing the bracketed author would 'correct' their earlier combination.

In *Senecio* the correct name is *Senecio streptanthifolius* Greene according to Cronquist [(1994: 184), with extensive synonymy]. If it is a *Packera* the name is *Packera streptanthifolia* (Greene) W.A. Weber & Á. Löve (1981: 48), see Trock (2006: 599) who did not accept the varieties distinguished by Bain (1988).

Senecio cymbalarioides subsp. moresbiensis Calder & R.L. Taylor

Senecio cymbalarioides (author not given; H. Buek, see below) subsp. **moresbiensis** Calder & R.L. Taylor, *Canad. J. Bot.* 43:1399. 1965. *Senecio streptanthifolius* Greene var. *moresbiensis* (Calder & R.L. Taylor) B. Boivin, *Naturaliste Canad.* 93:1051. 1966, nom. inval., see note. *Senecio resedifolius* Less. var. *moresbiensis* (Calder & R.L. Taylor) B. Boivin, *Phytologia* 23 (1972) 108. *Senecio moresbiensis* (Calder & R.L. Taylor) G.W. Douglas & Ruyle-Dougl., *Canad. J. Bot.* 56:1710. 1978. *Packera moresbiensis* (Calder & R.L. Taylor) J.F. Bain, *Novon* 9:457. 1999. *Packera subnuda* (DC.) Trock & T.M. Barkley var. *moresbiensis* (Calder & R.L. Taylor) Trock, *Sida* 21:289. 2004. TYPE: CANADA. BRITISH COLUMBIA: Moresby Isl., Takakia lake, Calder, Saville & Taylor 23066 (HOLOTYPE: DAO).

The authorship of the specific combination was not given by Calder & Taylor. In 1968 they cited Nuttall as the author, but Taylor (1978) said that Buek had been intended. I suspect she fell in the same trap as Weber & Löve previously did.

Boivin made the combination *Senecio streptanthifolius* Greene var. *moresbiensis* B. Boivin, which is invalid, as it lacked a full and direct reference to the basionym. Since in *Senecio* this seems to be the name required at the varietal level, the necessary combination needs to be validated. As a species it is *Senecio moresbiensis* (Calder & R.L. Taylor) G.W. Douglas & Ruyle-Dougl.

In *Packera* the correct name is *Packera subnuda* (DC.) Trock & T.M. Barkley var. *moresbiensis* (Calder & R.L. Taylor) Trock or *Packera moresbiensis* (Calder & R.L. Taylor) J.F. Bain. Trock (2004: 289) opted to recognise the varietal status. That in Trock (2006) *Packera streptanthifolia* is followed by *Packera subnuda* is not indicative of any other relationship than an alphabetical one.

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